

SELECTIVE SPACER TO PREVENT METAL OXIDE FORMATION DURING POLYCID REOXIDATION

Abstract of the Disclosure

A selective spacer to prevent metal oxide formation during polycide reoxidation of a feature such as an electrode and a method for forming the selective spacer are disclosed. A material such as a thin silicon nitride or an amorphous silicon film is selectively deposited on the electrode by limiting deposition time to a period less than an incubation time for the material on silicon dioxide near the electrode. The spacer is deposited only on the electrode and not on surrounding silicon dioxide. The spacer serves as a barrier for the electrode during subsequent oxidation to prevent metal oxide formation while allowing oxidation to take place over the silicon dioxide.